

Tyler

STATE OF COLORADO

Roy Romer, Governor
Patti Shwayder, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION

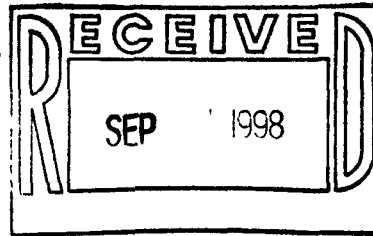
<http://www.cdphe.state.co.us/hm/>

4300 Cherry Creek Dr S
Denver, Colorado 80246-1530
Phone (303) 692-3300
Fax (303) 759-5355

222 S 6th Street, Room 232
Grand Junction, Colorado 81501-2768
Phone (970) 248-7164
Fax (970) 248-7198



Colorado Department
of Public Health
and Environment



August 25, 1998

Karan North
Kaiser-Hill Company, L L C
Rocky Flats Environmental Technology Site
P O Box 464
Golden, CO 80402-0464

**RE: Close-Out of the June 11, 1998 Inspection of the Present Landfill and PU&D Yard;
EPA ID# CO7890010526**

Dear Ms North

On June 11, 1998, inspectors from the Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the "Division") conducted a compliance evaluation inspection of the Present Landfill and the PU&D Yard at the Rocky Flats Environmental Technology Site (RFETS). No issues were identified as a result of that inspection. Therefore, the Division does not intend to take any further action in response to that inspection at this time.

The Division appreciates the assistance provided by RFETS for this inspection. Please contact James Hindman of my staff at (303) 692-3345 if you have any questions regarding this close-out of the inspection.

Sincerely,

Joe Schieffelin, Unit Leader
Federal Facilities Permitting and Compliance
Hazardous Materials & Waste Management Division

cc (w/ attached inspection report)

Janice Pearson, EPA
Bob April, DOE-RFFO
Ted Hopkins, RMRS
Bob Cathel, K-H
Cindy Burbach, CDPHE
Ed Smith, CDPHE

cc (w/o attachment)

Dan Miller, AGO
Tim Reyder, EPA
Jefferson County Health Department



ADMIN RECO
BZ -A-00078

EPA I D #CO7890010526

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION

HAZARDOUS WASTE INSPECTION REPORT

DATE OF INSPECTION	June 11, 1998
FACILITY	ROCKY FLATS PLANT - US DOE (Present Landfill and PU&D Yard)
LOCATION	16 MI NW OF DENVER GOLDEN, CO 80402
FACILITY REP	Bob Cathel, Env Coordinator, Kaiser-Hill
TELEPHONE	303-966-6880
TELEFAX	
NOTIFICATION STATUS	Large Quantity Generator Land Disposal TSD Facility
TYPE OF INSPECTION	Compliance Evaluation Partial
PARTICIPANTS	Roger Doak, CDPHE Edward Smith, CDPHE James Hindman, CDPHE Bob Cathel, Kaiser-Hill Tim McGrath, Kaiser-Hill/Source One J Russ Cirrillo, RMRS John Collins, RMRS David Kidd, RMRS David Preston, RMRS John Schmuck, RMRS Vicki Greever, DCI Daniel Henry, DCI Tim Schwietzer, DCI
WEATHER CONDITIONS	Sunny, warm
TIME IN	8 30 a m
TIME OUT	3 00 p m

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE (RFETS)

Inspection of Present Landfill and PU&D Yard

I. INTRODUCTION

Inspectors Edward Smith and James Hindman of the Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the "Division") conducted a compliance evaluation inspection of the Present Landfill and the Property Utilization and Disposal (PU&D) Yard at the Rocky Flats Environmental Technology Site (RFETS) on June 11, 1998. Roger Doak of the Division's Solid Waste Unit accompanied the Division inspectors for the inspection of the Present Landfill. The inspection had been prearranged with Bob Cathel, Environmental Coordinator for Kaiser-Hill (K-H), less than one week prior to the inspection. Additionally, prior to the inspection, the Division informed and invited Tim Reyder of the U S EPA to participate in the inspection since the Present Landfill is located in the RFETS buffer zone for which EPA is the lead regulatory agency for remediation and closure activities. Mr Reyder indicated he would participate, but on the day of inspection, Mr Reyder was unable to attend.

Prior to the tour of the landfill in the morning, the Division inspectors met with Bob Cathel, David Kidd, General Landfill Manager representing Rocky Mountain Remediation Services (RMRS), David Preston, RMRS Landfill Operations Manager, and John Collins of RMRS. After the tour of the Present Landfill, Division inspectors proceeded to the PU&D Equipment Yard located just to the northwest of the RFETS Industrial Area. At the PU&D Yard, Division inspectors and Bob Cathel met the following employees of DynCorp of Colorado, Inc.: Vicki Greever, Daniel Henry, and Tim Schwietzer. Division inspectors and facility representatives toured the PU&D Yard in the afternoon and then closed out the inspection with Bob Cathel.

During the morning meeting prior to the tour of the Present Landfill, facility representatives stated that RFETS has not disposed of waste at the Present Landfill since March 30, 1998. The landfill has not been closed at this point and approximately 3,000 to 4,000 cubic yards of space remain to be filled. Facility representatives stated that this remaining space is being kept for contingency use only (e.g., the off-site sanitary waste landfill is unable to take waste). Facility representatives stated that the Present Landfill is slated for closure under the CERCLA process during the year of 2004 under the current funding plan. The Present Landfill has a new operations plan which was approved last year and which allows RFETS to place waste in 22 cells in a mounded area, with each cell covering an area of 50 feet by 50 feet. Facility representatives stated that certain portions of the Present Landfill have historically received asbestos waste, but the Present Landfill no longer accepts friable asbestos waste.

Division inspectors inquired as to the authorization process that RFETS uses to receive wastes at the Present Landfill. According to facility representatives, several forms must be completed and approved prior to wastes being accepted at the landfill. A Material Transportation & Disposition Form (MTDF) must be completed which identifies the waste, including the amount, generating source, and owner. Once the MTDF is completed and reviewed, it is assigned a unique authorization number. The waste must also be accompanied by a Waste Release Evaluation completed by Radiological Engineering which must show that the waste is non-radioactive.

Finally, a Waste Acceptance Criteria Form must be properly completed which must demonstrate that the waste is non-RCRA hazardous and non-TSCA regulated. Division inspectors observed several completed Waste Acceptance Criteria Forms and observed that the forms include a section where a hazardous waste determination is declared. The generator makes arrangements with on-site trucking and the paperwork is delivered with the waste at a scheduled time. The landfill operator meets the truck at the landfill and verifies the paperwork and then conducts a physical inspection of the waste as it is dumped. For routine waste shipments (e.g., from trash dumpsters), two technicians are present at the landfill when the waste is unloaded. The technicians look for non-conformances such as free liquids, paint, etc., and document their observations in a daily log book. According to facility representatives, any non-conforming items are removed and returned to the generator for proper management. Additionally, a Radiological Control Technician (RCT) is present when routine waste is dumped and the RCT scans the waste pile. Division inspectors inquired as to how many times hazardous wastes had been found in waste dumped at the landfill during the past two years. According to facility representatives, the RFETS HazMat Team has had to respond two times during the past two years to remove hazardous wastes.

Facility representatives stated that since October 1997, non-PA dumpster waste has been shipped off-site, and since January 1998, PA dumpster waste has also been sent off-site. Facility representatives indicated that all non-hazardous wastes (except for liquids and excess chemicals) are now being shipped to the Front Range Landfill located in Erie, Colorado. According to facility representatives, RFETS now has two teams of two people who conduct dumpster inspections on each Monday, Wednesday, and Friday where dumpsters are randomly selected for 100% visual inspection of the contents including off-loading and opening of trash bags. Approximately 6 X 1 cubic yard dumpsters can be inspected per day per two person team. On Tuesdays and Thursdays, the teams visually inspect dumpsters without off-loading the contents. Any non-conforming dumpsters are locked and posted with a sign until building managers correct the problems and the dumpster is re-inspected. Generally, the non-conformances involve non-routine wastes in a routine-waste container (i.e., dumpster), according to facility representatives. Non-routine non-hazardous wastes are collected in roll-off containers, which are all visually inspected as they are filled. Each shipment of non-hazardous waste is accompanied by a bill of lading or a manifest, according to facility representatives.

Division inspectors inquired as to current non-hazardous waste generation rates. Facility representatives stated that approximately 5,000 cubic yards of non-hazardous waste had been generated and shipped off-site in May 1998, mostly from the Building 123 demolition project.

II FACILITY DESCRIPTION

Present Landfill (IHSS 114).

The Present Landfill is identified as Individual Hazardous Substance Site (IHSS) Number 114. The Present Landfill occupies an area of 28 acres in the buffer zone, directly north of the industrial area of RFETS. Operation of the Present Landfill began on August 14, 1968 when wastes were placed in a natural drainage at the headwaters of No Name Gulch. According to an April 13, 1995 document prepared by EG&G titled "Proposed Closure Strategy for Operable

Unit No 7--Draft," the total volume of material in the landfill was estimated to be 415,000 cubic yards in 1994, and the " thickness of waste material ranges from less than 1 foot to approximately 40 feet near the east face of the landfill, which coincides with the deepest portion of the original drainage " According to the same report, a significant portion of the waste in the bottom of the landfill is saturated with ground water Contaminated leachate from the landfill has entered the ground water and discharges from a seep located at the base of the east face of the landfill According to the "Proposed Closure Strategy for Operable Unit No 7--Draft," the flow rate from the seep ranges from 2 gallons per minute (gpm) to 7 gpm The seep discharges into the East Landfill Pond, which was constructed with an engineered dam in 1974 after tritium and strontium were detected in leachate discharging from the landfill seep Currently, contaminated water from the landfill seep is processed through a granular activated carbon unit and then discharged to the East Landfill Pond, which has 7.2 million gallons of capacity and is filled to approximately one-half to two-thirds full, according to facility representatives

Various wastes were historically disposed of in the Present Landfill, including radioactive and hazardous wastes According to a draft document titled "Proposed Closure Strategy for Operable Unit No 7" dated April 13, 1995, RFETS received RCRA regulated hazardous wastes at the Present Landfill until November 1986 when RFETS ceased this activity According to the Rocky Flats Cleanup Agreement (RFCA), Attachment 3 (RFETS IHSS List), IHSS 114 is designated as a RCRA unit per the Rocky Flats Interagency Agreement (IAG) that was signed in 1991

Property Utilization and Disposal (PU&D) Yard

The PU&D Yard included within the scope of the June 11, 1998 inspection is the area located in the RFETS Buffer Zone to the northwest of the RFETS Industrial Zone, and just south of the currently used firing range The PU&D Yard is operated by DynCorp of Colorado, Inc (DCI) and occupies an area of approximately five acres The PU&D Yard is an outdoor gravel-covered area where miscellaneous pieces of equipment, scrap metal, and empty containers, are stored awaiting reuse, sale to an off-site entity, or shipment off-site for recycling or disposal The PU&D Yard is not permitted for the management of hazardous wastes, and currently no hazardous waste generation areas are designated at the PU&D Yard

III. OPERATIONS INSPECTED

Accompanied by facility representatives, Division inspectors were able to inspect all areas associated with the Present Landfill operated by RMRS, and the PU&D Yard operated by DCI However, Division inspectors did not inspect a small area located at the 5001 Yard (approximately 100 yards west of the PU&D Yard) where DCI is storing several large pieces of equipment

Present Landfill

At the Present Landfill, Division inspectors met briefly with John Schmuck of RMRS who briefly described the system for treating effluent from the landfill seep The treatment system consists of a settling/equalization basin tank which collects effluent from the landfill seep which is passed through two filter socks and then gravity fed through two granular activated carbon (GAC) filtration units located in series in polyethylene drums Mr Schmuck indicated that the

treatment system is unable to handle high flow rates which occur during the rainy season in the spring. During these times, the GAC unit is bypassed after notifying EPA and CDPHE according to Mr. Schmuck. Additionally, Mr. Schmuck stated that vinyl chloride is present in the landfill leachate which is not amenable for treatment by the GAC filters. For these reasons, RFETS is considering taking the GAC units off-line and using splash pads for passive aeration of benzene and vinyl chloride in the landfill leachate. According to Mr. Schmuck, the treatment system came on-line in early 1996 and the lead GAC unit is changed out approximately once every four to six weeks. Mr. Schmuck stated that the spent GAC is considered to be a remediation waste and is stored in a RCRA permitted unit as a low-level mixed waste. Mr. Schmuck stated that the spent filter socks and sediments are also considered to be a remediation waste and are managed in a cargo unit at the contractor yard.

In the afternoon prior to the PU&D Yard tour, Division inspectors and Bob Cathel proceeded to trailer T891B where they met J. Russ Cirrillo (RMRS) who operates the CERCLA wastewater treatment plant at Building 891. Mr. Cirrillo accompanied the Division inspectors and Mr. Cathel to the Remediation Waste Storage Cargo Container located near Building 891, where the Division inspectors were shown two 55-gallon drums. The cargo container was identified with an RMRS Cargo Container Tag Number 9091 and DOE property control number 00133966. One of the drums in the cargo container accumulates spent filter socks from Building 891 and the other drum accumulates spent filter socks from the Present Landfill leachate treatment system. Both drums were observed to be closed and labeled as "Non-RCRA Regulated Waste" with each label identifying the contents as filter socks from the respective source. According to Mr. Cirrillo, the drum accumulating spent filter socks from the Present Landfill treatment system has never been filled.

PU&D Yard

For the tour of the PU&D Yard, Division inspectors were accompanied by Mr. Cathel, Ms. Greever, and Mr. Henry. According to Mr. Henry, RFETS policy is to drain liquids from all equipment prior to storage at the PU&D Yard. Division inspectors observed various items of equipment and scrap materials including four pallets and one half-size crate of lead bullets collected from the firing range awaiting recycling. In a small shed located along the west side of the PU&D yard, Division inspectors observed one unmarked fiber drum with approximate capacity of 50-gallons. Facility representatives opened the container and observed a pig-tailed plastic bag of unknown solid material. The property control number for the shed is 00074356-00. Division inspectors observed two fluorescent light bulbs in scrap light fixtures located in the southwest corner of the PU&D Yard. Facility representatives stated that the light bulbs are probably still good, but they will remove them and manage them as a waste at Building 334 to prevent breakage from occurring at the PU&D Yard. Division inspectors observed four grey 55-gallon drums of material along the north side of the PU&D Yard. Each drum was closed and unmarked except that each drum was identified with a WEMS number. Division inspectors observed two aerosol containers of material at the PU&D Yard which appeared to be waste chemicals. Facility representatives collected these aerosol containers and stated that they would be managed appropriately.

One radiological material area (RMA) has been established in a cargo container for items with fixed radiological contamination above free-release levels. Facility representatives stated that

the PU&D Yard does not accept items with radiological contamination, but that these items had been sent to the PU&D Yard years ago before free-release levels were lowered. A second RMA exists at the PU&D Yard where three tanker trailers are stored which reportedly were used to collect contaminated fire water from the Building 776 fire which occurred long ago. Both RMAs are posted and Division inspectors did not enter either area.

IV. RECORDS REVIEWED

During the afternoon of June 11, 1998, Division inspectors reviewed the following documents associated with the Present Landfill from January 1997 to the date of the inspection: Sanitary Landfill Information Log, Solid Waste Landfill and Facility Inspection Checklist, RFETS Solid Sanitary Waste Log, and RFETS Sanitary Landfill Waste Volume documents. No issues were identified at the time of inspection based on a review of these documents. No records were reviewed relating to the PU&D Yard.

V. INSPECTION CLOSEOUT

At approximately 3:00 p.m. on June 11, 1998, Division inspectors met with Bob Cathel (K-H) in Building T119A to close-out the inspection. Division inspectors completed a Notice of Inspection (NOI) which was signed by Bob Cathel. On the NOI, Division inspectors noted that there were no findings at the time of inspection (see attachment 1). On the NOI, Division inspectors requested RFETS to provide the following two items of information by June 25, 1998:

1. Information describing the contents of a 1X50 gallon fiber drum located in a shed along the west fence of the PU&D Yard.
2. Information, including copies of any WEMS reports, describing the contents of 4X55 gallon grey steel drums located between cargo containers along the north fence of the PU&D Yard. Two of these drums were identified with the following numbers: G04161 and G04157.

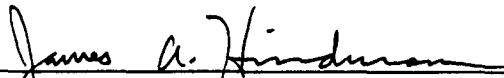
Division inspectors left a copy of the NOI with Mr. Cathel and left the facility on June 11, 1998.

VI. INSPECTION FINDINGS

No issues were identified at the time of inspection on June 11, 1998.


VII. SIGNATURES

Prepared By


James A Hindman

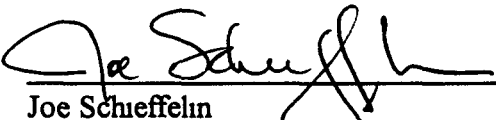
7/22/98
Date

Reviewed By


Edward Smith

7/24/98
Date

Approved By


Joe Scheffelin

7/24/98
Date

VIII. ATTACHMENTS

- 1 NOI issued on June 11, 1998
- 2 Graph titled, "Sanitary Waste Generated for Onsite Disposal" dated June 4, 1998
- 3 Copy of "Quarterly Explosive Gas Survey for Present Sanitary Landfill" from D J Preston (RMRS) dated April 22, 1998
- 4 Copy of Figure 1 OU7 Landfill Treatment System Influent Analytical Results for Volatile and Semi-Volatile Organics (8/97 through 1/98)
- 5 Copy of Figure 2 OU7 Landfill Treatment Lead GAC Effluent Analytical Results for Volatile and Semi-Volatile Organics (8/97 through 1/98)
- 6 Copy of Figure 3 OU7 Landfill Treatment System Effluent Analytical Results for Volatile and Semi-Volatile Organics (8/97 through 1/98)
- 7 Copy of Figure 4 OU7 Landfill Pond Analytical Results for Volatile and Semi-Volatile Organics (8/97 through 1/98)
- 8 Photographs
- 9 Copy of Written Response to the June 11, 1998 NOI

Attachment 1: Notice of Inspection (NOI)

Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
4300 Cherry Creek Drive South, Mail Code HMWMD-CP-B2, Denver, CO 80222
(303) 692-3300

Notice of Inspection

Facility Name <u>Rocky Flats,</u> <u>Current Landfill ; PU+D Yard</u>		EPA ID # <u>C07890010526</u>	Date <u>June 11, 1998</u>
Street <u>PO Box 928</u>		Telephone # <u>966-7000</u>	Seq # <u>N/A</u>
City <u>Golden</u>	County <u>Jefferson</u>	Zip <u>80402</u>	Inspection Arranged Prior to Inspection <input checked="" type="checkbox"/> Yes () No
Facility Representatives and Titles <u>Bob Cathel, Kaiser-Hill Env Coord</u>		Enter By <input checked="" type="checkbox"/> Consent () Warrant	Hour In <u>8:30 a.m</u>
		Agency <input checked="" type="checkbox"/> State () Oversight () Joint	Hour Out <u>3:00 p.m</u>
NOTIFICATION(S) <input checked="" type="checkbox"/> LQG, <input type="checkbox"/> SQG, <input type="checkbox"/> Exempt, <input checked="" type="checkbox"/> LDF, <input checked="" type="checkbox"/> TSF, <input type="checkbox"/> Transporter, <input type="checkbox"/> Non-Notifier, or <input type="checkbox"/> Other _____ If Status Changed, Facility Should Revise Notification			

COMMENTS

Current Landfill inspection: No issues at this time.

PU + D Yard: Please provide the following by June 25, 1998:

- ① Information describing the contents of a 1x50-gallon fiber drum located in a "TUFF SHED" along the west fence of the PU+D Yard. The property control number on the shed is 00074356-00.
- ② Information, including copies of any WEMS reports, describing the contents of 4x55-gallon grey steel drums located between cargo containers along the north fence of the PU+D Yard. Two of these drums were identified with the following numbers: G04161 and G04157.

Compliance Assistance ☐ Compliance Information ☐ Referral to Compliance Assistance ☐ Pollution Prevention ☐ Field Assistance

Samples, Documents, Plans, and/or Photos Collected	4
1	5
2	6
3	7

Samples requested and received by facility () Yes ☒ No If Yes () Duplicate () Split

The facts established by this inspection will be reviewed by State personnel A final determination of your facility's compliance with State Regulations will be made as a result of this review The review may reveal additional violations.

Receipt of this Notice of Inspection Form is Acknowledged

Lead Inspector James Hindman
Assisting Inspector(s) and Multimedia Participant(s)

Bob Cathel KH

Edward Smith

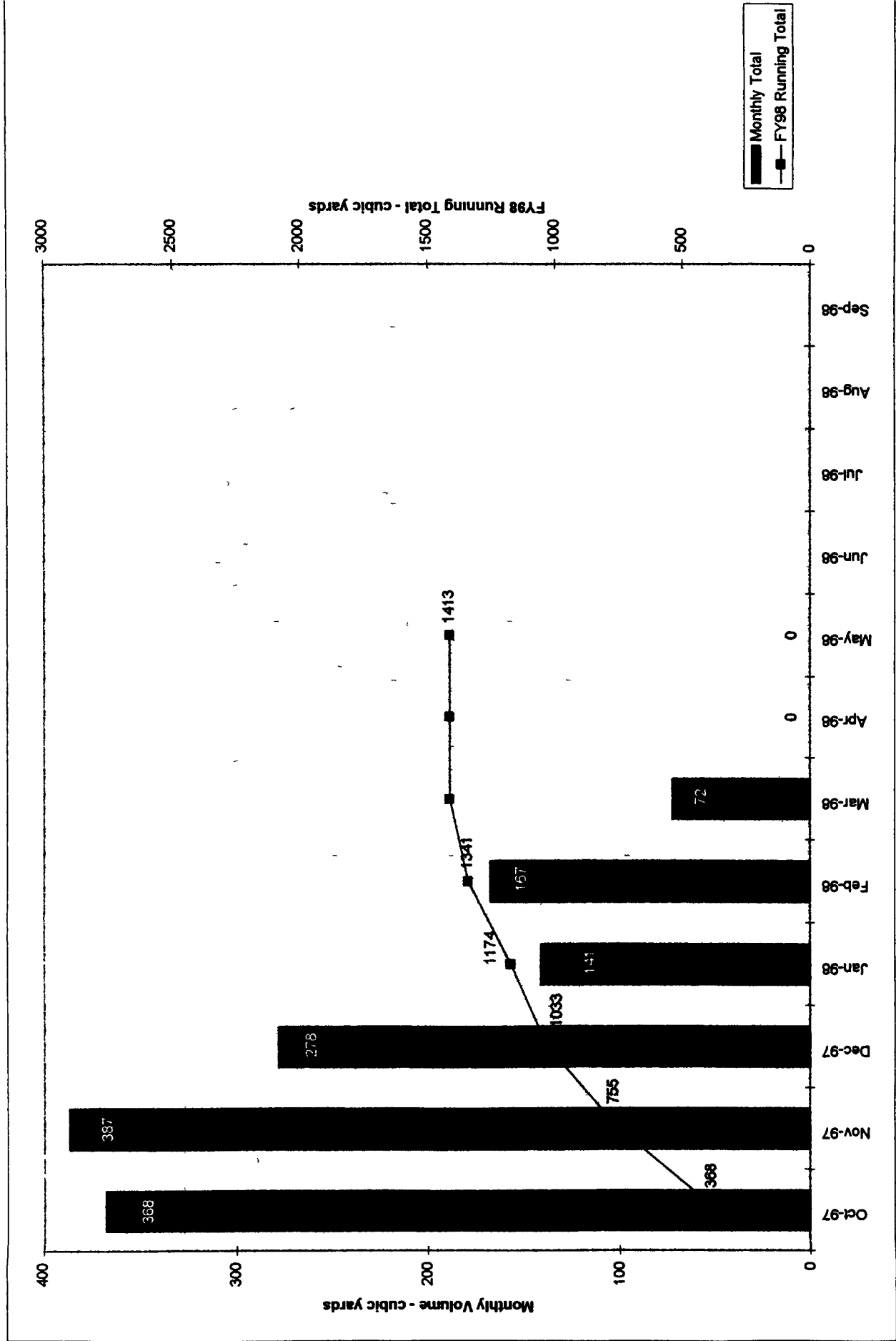
Roger Doak (for Landfill)

Signature of Facility Representative

Attachment 2:
Graph:
“Sanitary Waste Generated for Onsite Disposal”
dated June 4, 1998

Sanitary Waste Generated for Onsite Disposal

6/4/98



Attachment 3:
Quarterly Explosive Gas Survey for Present
Sanitary Landfill dated April 22, 1998



Rocky Mountain
Remediation Services, L L C
protecting the environment

MEMORANDUM

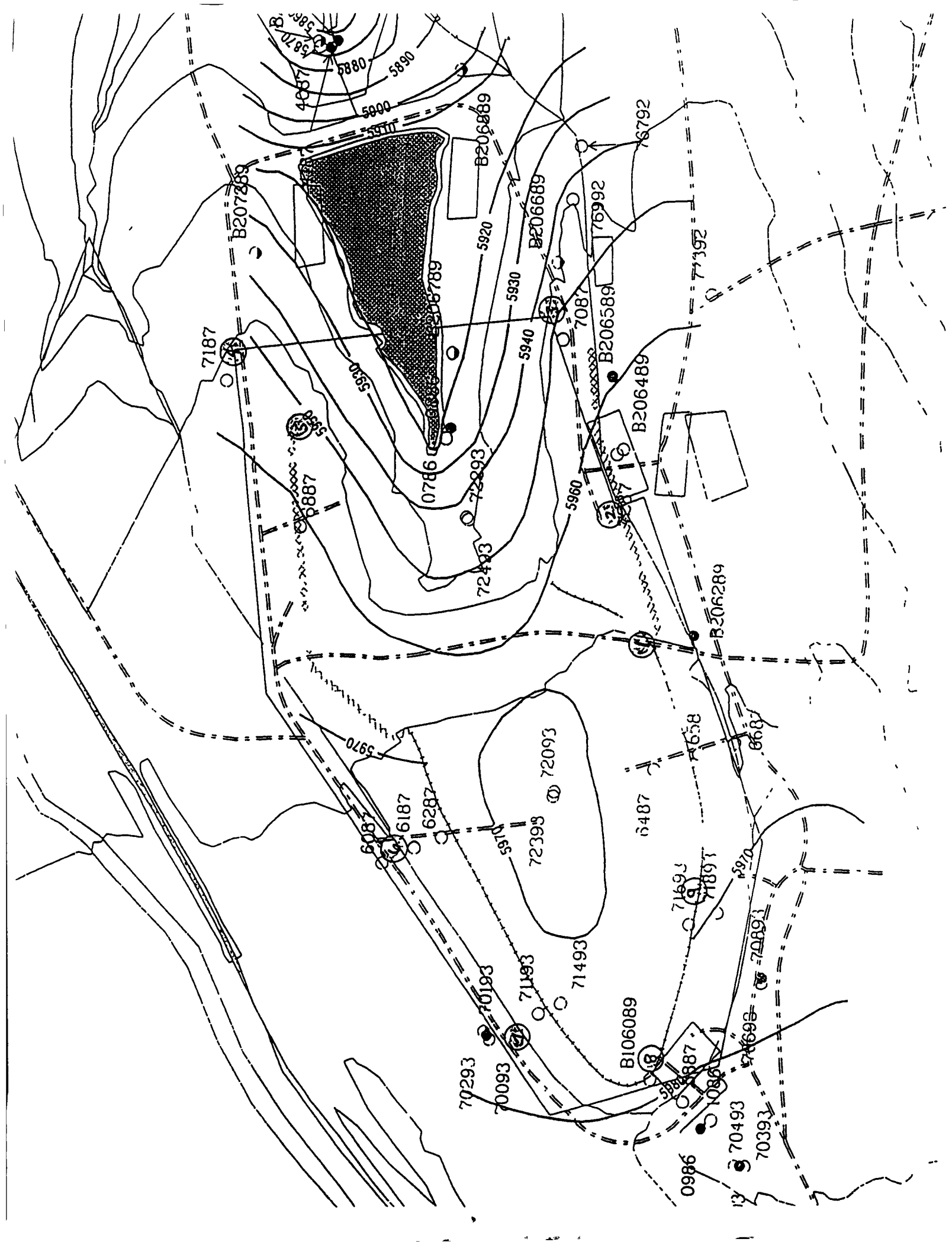
DATE 4/22/98
TO Distribution
FROM D J Preston, Waste Storage Facility / Operations, T893A, X5527 DP
SUBJECT QUARTERLY EXPLOSIVE GAS SURVEY FOR PRESENT SANITARY LANDFILL
DJP-012-98

The Landfill Operations support organizations have completed the quarterly explosive gas survey for the present sanitary landfill. Solid waste regulations require that the concentrations of explosive gases generated by the landfill facility shall not exceed at the boundary, the lower explosive limit of five percent (5 0%) by volume in air for methane. This quarterly monitoring is for the second quarter of FY98.

The perimeter of the landfill was monitored for fugitive methane gas emissions on April 22, 1998. The survey was conducted using a calibrated Mine Safety Appliance (MSA) GASPORT™ combustible gas detector, RFETS identification number 0012588300. An attached revised map showing the test locations is attached to this memorandum. Gas testing was performed at numbered locations (1- 9). All required data has been recorded on the attached Sanitary Landfill Explosive Gas Survey Sheet. Methane gas was not detected at any of the nine sampling locations. This letter and associated survey will serve as written documentation that the survey was performed. This information will be filed in the current Sanitary Landfill operating record.

Distribution

D R. Lobdel
A W Medina
K North
P M Sauer
Landfill Operating Record /



Attachment 4:
Figure 1:
OU7 Landfill Treatment System Influent
Analytical Results

Figure 1

OU7 SW00396 Landfill Treatment System Influent

RFCA

Action

Volatiles (ug/L)	Action Level	Concentration							Total Mass (g)
		13-Aug-97	8-Sep-97	8-Oct-97	15-Oct-97	10-Nov-97	8-Dec-97	15-Jan-98	
1,1-Dichloroethane	1000	4 00	3 90	5 40	4 81		5 60	6 90	13 19
1,2-Dichlorobenzene	620			0 44			0 47	0 54	0 61
1,4-Dichlorobenzene	75			0 56			0 66	0 65	0 79
Acetone					8 47				2 29
Benzene	1	1 20	1 10	1 50			1 70	2 10	3 52
Chlorobenzene	100			0 29				0 54	0 33
Chloroethane		13 00	12 00	15 00		15 00	18 00	16 00	42 05
cis-1,2-Dichloroethene	70						0 42	0 52	0 46
Ethylbenzene	680	6 20	6 30	9 70	8 32	12 00	9 40	12 00	28 25
Napthalene	620	13 00	12 00	30 00	22 90	16 00	37 00	41 00	74 26
Toluene	1000			1 30	1 35		1 40	1 10	1 95
Trichloroethene	2 7			0 55			0 70	0 91	0 93
Vinyl chloride	2	1 70		2 20	1 84		2 50		3 28
Xylene (total)	10000	13 00	14 00	3 00	1 47	3 60	3 20	2 80	20 79
Total Volatiles									192 72
SemiVolatiles									
Acenaphthene	520	1 10		2 10			4 00	4 90	5 51
bis (2-Ethylhexyl)Phthalate	10		1 60				3 00	1 30	3 03
Butylbenzylphthalate	300								
Di-n-Butylphthalate	10								
Diethylphthalate	23000								
Ethylbenzene	680			5 90					1 60
Fluorene	1300			1 80			2 80	3 00	3 33
Naphthalene	620	1 80	1 30	12 00	6 28		16 00		14 75
Phenanthrene	10			2 80			4 20	4 00	4 78
Phenol	2560								
Total SemiVolatiles									32 98

Average Monthly Flow (gal/min)

Average Monthly Flow (l/min)

NOTE ONLY ANALYTES DETECTED BY EPA METHODS 8260 AND 8270 WHICH HAVE RFCA LEVELS ARE LISTED

NOTE RFCA ACTION LEVEL EXCEEDANCES ARE SHADED

NOTE NO VALUES SHOWN INDICATE BELOW DETECTION LIMIT

Attachment 5:
Figure 2:
OU7 Landfill Treatment Lead GAC Effluent
Analytical Results

Figure 2
OU7 SW00296 Landfill Treatment Lead GAC Effluent

Volatiles (ug/L)	RFCA Action Level	Concentration	GAC CHANGE						
			13-Aug-97	8-Sep-97	8-Oct-97	15-Oct-97	10-Nov-97	8-Dec-97	15-Jan-98
1,1-Dichloroethane	1000		2 70	4 40			5 00	6 80	7 70
1,2-Dichlorobenzene	620							0 46	
1,4-Dichlorobenzene	75							0 60	
Acetone						6 25			
Benzene	1			0 59					1 10
Chlorobenzene	100								
Chloroethane		4 40		16 00			17 00	18 00	19 00
cis-1,2-Dichloroethene	70							0 50	0 38
Ethylbenzene	680			1 40				11 00	3 70
Naphthalene	620	1 40		1 00				36 00	1 10
Toluene	1000			0 23				1 50	0 58
Trichloroethene	2 7							0 87	0 43
Vinyl chloride	2			2 20				2 80	3 00
Xylene (total)	10000			1 20				3 70	0 76
SemiVolatiles									
Acenaphthene	520							4 10	
bis (2-Ethylhexyl)Phthalate	10							3 70	
Butylbenzylphthalate	300								
Di-n-Butylphthalate	10								
Diethylphthalate	23000								
Ethylbenzene	680								
Fluorene	1300								
Naphthalene	620							19 00	
Phenanthrene	10							4 60	
Phenol	2560								
Average Monthly Flow (gal/min)		3 20	3 40	3 20	3 20	3 20	3 10	3 00	2 80
Average Monthly Flow (l/min)		12 11	12 87	12 11	12 11	12 11	11 73	11 36	10 60

NOTE ONLY ANALYTES DETECTED BY EPA METHODS 8260 AND 8270 WHICH HAVE RFCA LEVELS ARE LISTED

NOTE RFCA ACTION LEVEL EXCEEDANCES ARE SHADED

NOTE NO VALUES SHOWN INDICATE BELOW DETECTION LIMIT

Attachment 6:
Figure 3:
OU7 Landfill Treatment System Effluent
Analytical Results

Figure 3

OU7 SW00196 Landfill Treatment System Effluent

RFCA Action Level	Volatiles (ug/L)	GAC CHANGE							Total Mass (g)
		Concentration	13-Aug-97	8-Sep-97	8-Oct-97	15-Oct-97	10-Nov-97	8-Dec-97	
									8/97 through 1/98
	1000				2 00			3 50	4 96
	620								0 00
	75								0 00
	1								1 56
	100								0 00
	100								0 00
	70								0 00
	680								27 61
	620								0 00
	1000								0 00
	2 7								3 78
	2								0 00
	10000								0 00
									2 07
									0 00
									Total Volatiles
									0 00
									1 88
									0 00
									2 29
									0 00
									0 00
									0 00
									0 00
									0 00
									0 00
									0 00
									Total SemiVolatiles
									2 80
									10 60

NOTE ONLY ANALYTES DETECTED BY EPA METHODS 8260 AND 8270 WHICH HAVE RFCA LEVELS ARE LISTED

NOTE RFCA ACTION LEVEL EXCEEDANCES ARE SHADED

NOTE NO VALUES SHOWN INDICATE BELOW DETECTION LIMIT

Attachment 7:
Figure 4: OU7 Landfill Pond Analytical Results

Figure 4
OU7 SW098 Landfill Pond

Volatiles (ug/L)	RFCA Action Level	GAC CHANGE				
		Concentration	13-Aug-97	8-Sep-97	8-Oct-97	15-Oct-97 10-Nov-97 8-Dec-97 15-Jan-98
1,1-Dichloroethane	1000					
1,2-Dichlorobenzene	620					
1,4-Dichlorobenzene	75					
Acetone						
Benzene	1					
Chlorobenzene	100					
Chloroethane						
cis-1,2-Dichloroethene	70					
Ethylbenzene	680					
Napthalene	620					
Toluene	1000					
Trichloroethene	27					
Vinyl chloride	2					
Xylene (total)	10000					
SemiVolatiles						
Acenaphthene	520					
bis (2-Ethylhexyl)Phthalate	10					
Butylbenzylphthalate	300					
Di-n-Butylphthalate	10					
Diethylphthalate	23000					
Ethylbenzene	680					
Fluorene	1300					
Naphthalene	620					
Phenanthrene	10					
Phenol	2560					
Average Monthly Flow (gal/min)		320	340	320	320	300
Average Monthly Flow (l/min)		1211	1287	1211	1211	1136

NOTE. ONLY ANALYTES DETECTED BY EPA METHODS 8260 AND 8270 WHICH HAVE RFCA LEVELS ARE LISTED

NOTE RFCA ACTION LEVEL EXCEEDANCES ARE SHADED

NOTE NO VALUES SHOWN INDICATE BELOW DETECTION LIMIT

Attachment 8: Photographs



July 1, 1998

98-RF-03389

James Hindman
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80222-1530

PHOTOGRAPHS ASSOCIATED WITH CDPHE INSPECTION ON JUNE 11, 1998
BLC-003-98

On June 11, 1998 the Colorado Department of Public Health and Environment (CDPHE) conducted an inspection of the on-site landfill and PU&D yard. Part of the response to CDPHE includes photos from these areas. These photos are labeled as Negative Numbers 50677-04 through 50677-14 for the landfill and 50678-15 through 50678-21 for the PU&D yard.

If you have any questions please contact Bob Cathel at 966-6880

Bob Cathel
Environmental Management & Compliance
Kaiser-Hill Company, L L C

BLC sau

Enclosure
As Stated

Kaiser-Hill Company, L L C

Courier Address Rocky Flats Environmental Technology Site, State Hwy 93 and Cactus, Rocky Flats, CO 80007 • 303 966 7000

Mailing Address P O Box 464, Golden, Colorado 80402-0464

98-RF-03389



KAISER-HILL
COMPANY

DIST	LTR	ENC
BENSUSSEN, S.		
BRAILS FORD, M		
JUHL		
CARD, R. G.		
ILL, J		
IANI, V		
LARTINEZ L		
ORTH K		
ARKER A		
ILLER R		
UOR N		
DOORHEIS G		
HELTON D		
ORTH K		
ARR M		
FILE	X	
ORRES CTRL	X	
AFFIC	X	
MIN REC		
TS		
CLASSIFICATION		
NI		
CLASSIFIED	X	X
CONFIDENTIAL		
SECRET		

AUTHORIZED CLASSIFIER
SIGNATURE
[Signature]
Exempt from Class
Per CEX-266-95
77-06-98
REPLY TO RF CC NO

SECTION ITEM STATUS
PARTIAL/OPEN
CLOSED
TR APPROVALS
SIG & TYPIST INITIALS
scf
46469 (REV 7/95)

July 1, 1998

98-RF-03389

James Hindman
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80222-1530

PHOTOGRAPHS ASSOCIATED WITH CDPHE INSPECTION ON JUNE 11, 1998
BLC-003-98

On June 11, 1998 the Colorado Department of Public Health and Environment (CDPHE) conducted an inspection of the on-site landfill and PU&D yard. Part of the response to CDPHE includes photos from these areas. These photos are labeled as Negative Numbers 50677-04 through 50677-14 for the landfill and 50678-15 through 50678-21 for the PU&D yard.

If you have any questions please contact Bob Cathel at 966-6880

Bob Cathel
Bob Cathel
Environmental Management & Compliance
Kaiser-Hill Company, L L C

BLC sau

Enclosure
As Stated

Kaiser Hill Company, L L C
Courier Address Rocky Flats Environmental Technology Site, State Hwy 93 and Cactus, Rocky Flats, CO 80007 • 303 966 7000
Mailing Address PO Box 464, Golden, Colorado 80402 0464

Attachment 9:
Copy of Written Response
to the June 11, 1998 NOI

June 25, 1998

John Wrapp, Bldg T130C, X5883
Manager, Environmental Management & Compliance
Kaiser-Hill Company, L L C

WRITTEN RESPONSE TO NOTICE OF INSPECTION DATED JUNE 11, 1998
JMM-0612-98

In response to the Colorado Department of Public Health and Environment (CDPHE) Notice of Inspection (NOI) dated June 11, 1998, the following items have been addressed

- Item 1 The contents of the 50 gallon fiber drum located in a "Tuff Shed" are unknown The fiber drum has been labeled "Hazardous Waste" and was place into a 90-Day Accumulation Area (#2455) A sample has been submitted for analysis to determine RCRA characterization and radiological release DCI will provide K-H with the sample results by August 14, 1998
- Item 2 The contents of the four (4) 55-gallon gray drums located along the north fence of the PU&D Yard are scrap metal (brass) for recycle WEMS reports were requested, however, because the drums contain scrap metal no WEMS identification is required The WEMS numbers have been removed and the drums have been labeled "Brass for Recycle"

Environmental Programs and Compliance discussed the items identified in the NOI with PU&D personnel and the importance of proper drum labeling If you have questions, please feel free to call me at extension 6087

P.A. Granquist for J.M. Mynard

Jane M Mynard
Acting Manager, Environmental Programs & Compliance
DynCorp of Colorado, Inc

MJP mjp

cc
Garth Beers
Norm Boyter
Vicki Greever

Alan Jones
Rich Slocum
Ralph Tuccillo

REVIEWED FOR CLASSIFICATION/UCNI

By *J.A. Neekem*
Date 07-06-98 (U/NU)